

Montana State Library

This cover sheet created by Internet Archive for formatting.

Industrial Horizons



MONTANA: FRONTIER OF INDUSTRIAL OPPORTUNITY

Vol. 2—No. 4

April, 1957

News Publication — Montana State Planning Board

Small Industries Help State Economy

"CRAZY DUCKS" MADE IN BOZEMAN

One manufacturing operation few Montanans know about is Allied Manufacturing Corporation (AMC) of Bozeman, which has marketed 3 million plastic duck toys since 1954.

Minimum production is 300 dozen ducks per week, according to W. J. Sullivan, president. Marketed through a five-and-dime company and through independent toy dealers, the ducks contain a magnet and are guided over a pan of water by means of a wand with a piece of metal in the end.

This is a patented product; it just happens to be assembled in Bozeman. Raw materials come from many areas. The plastic ducks themselves are fabricated overseas, and freighted to Bozeman, where a magnet is added and the product packaged. Plastic for enclosing the magnet in the duck comes from California and Tennessee, and other raw materials come from Massachusetts.

AMC is planning to diversify into production of twenty other products, most of them in the novelties and amusement lines. These include magnetic typewriter eraser clips, magnetic chairs, plastic 3-D viewers for viewing photographs, pull horns, plastic mice and various magnetic toys.

While this is a relatively small operation, hiring around 25 persons, it does demonstrate that manufacturing is possible in Montana.

Last month INDUSTRIAL HORIZONS had an article entitled "Industry to Be Found in Your Own Back Yard."

A lot of people around Montana are saying it's impossible to start an industry here. They all have their reasons for saying this, but they don't realize that Montana now has a certain amount of manufacturing. In fact, manufacturing employment represents around twelve per cent of all non-agricultural employment in Montana.

And much of this manufacturing is done by small firms. Nearly 85 per cent of Montana manufacturing establishments have less than twenty employees.

If these small manufacturers can stay in business, there is no reason more can't make a go of it.

In order to show how small manufacturers operate in Montana, INDUSTRIAL HORIZONS this issue features five of these small, locally-owned and managed industries:

(1) Mission Homes and Columbia Paints utilize Montana natural resources to serve Montana markets. Many Montanans don't realize it is possible to manufacture an increasing share of our own consumer goods. There's no reason everything has to be shipped in from somewhere else. In many cases the local manufacturer has a cost advantage over manufacturers in other regions of the country who ship products into Montana.

(2) Allied Manufacturing and National Hydraulic make patented products for national distribution. The only reason they are in Bozeman and Billings is that's where the owner of the patent lives. Montana manufacturers, by making a product with a patented process, can compete in national markets.

(3) Belgrade Alfalfa Mill and American Chemet (a division of Columbia Paints) process our natural resources for out-of-state markets.

How many people with ideas just as good as these live in your community?

Is there anything you can do to help them along? Remember, a new industry, even a small one, may mean the difference between prosperity and stagnation.

Belgrade Alfalfa Mill Ships to West Coast

One of Montana's most interesting manufacturing enterprises is Belgrade Alfalfa Mill, Inc.



Brown's Photo

Belgrade Alfalfa Mill processes 10,000 tons of alfalfa a year.

Dehydration of alfalfa is a good example of manufacturing tied to agriculture. No value is added to the alfalfa until it has been through the process of dehydration. The Belgrade Alfalfa Mill, located in Belgrade, Montana, is the only mill in the state that processes alfalfa into dehydrated alfalfa. The mill has a capacity of 10,000 tons of alfalfa a year. The dehydrated alfalfa is then shipped to the West Coast, where it is used as a feed supplement for livestock. The mill is owned and operated by Belgrade Alfalfa Mill, Inc., which was founded in 1954. The mill is a good example of a small, locally-owned and managed industry that has been successful in Montana.

Fuel and Hay

Factor in the location of the industry. Fuel and hay are available in Belgrade. It is on the main road to

natural gas in western Montana. Belgrade is the center of a large alfalfa area, and it is the only mill in the state that processes alfalfa into dehydrated alfalfa. The mill is a good example of a small, locally-owned and managed industry that has been successful in Montana.

One of the problems facing the mill is the lack of a local market for dehydrated alfalfa. The mill is located in a rural area, and there is no local market for the product. The mill is a good example of a small, locally-owned and managed industry that has been successful in Montana.

The mill is a good example of a small, locally-owned and managed industry that has been successful in Montana. The mill is a good example of a small, locally-owned and managed industry that has been successful in Montana.

Industrial Growth Starts At Home . . .

Helena Firm Competes For Local Market

For 10 years Montana has had a paint factory—Columbia Paint Company, of Helena.

Started out as existing in December of 1946, it was a Chicago paint salesman, Columbia Paint, got samples from zinc metal. It over the West, had these samples tested for suitability in paint manufacturing, and discovered the zinc from the Anaconda Company slag treating plant in East Helena, connected with the American Smelting and Refining Company zinc-lead smelting plant, was the most suitable.

Since 1946 over a million gallons of Columbia paint have been sold in Montana and Idaho. According to Hoyt Larison, Vice President and Sales Manager, over \$5 million has been spent in Montana in the form of raw materials, wages, taxes, services, and freight charges. Even though this is only a small company, its contribution to the state's economy is substantial.

Contributes to Economy

And, Larison adds, Columbia Paint wants to increase its contribution. "We hope the day will come when we can manufacture a paint using nothing but materials produced in Montana. Already we have leaded zinc oxide (which contains 12% zinc sulphate of white lead), linseed oil, and talc. With the addition of titanium, good exterior paint can be produced. There are known deposits of titanium in Montana which will someday be mined."

Columbia Paint manufactures over 100 varieties of paint. For several years they have supplied yellow and white traffic paint for marking Montana highways. Another special paint developed for the Montana Fish and Game Department is used in hatcheries, raising ponds. It is designed to insure fish growth and yet not be harmful.

Zinc and Talc

Another source of the company, Columbia Paint Company, produces leaded zinc oxide at East Helena. This is made from the zinc from the Anaconda Company slag treating plant, which is used in the color of the paint. The product is used in the manufacture of paint, and is also used in the manufacture of other products.

The company is also a member of the Montana Paint Manufacturers Association, and is a member of the Montana Paint Manufacturers Association. The company is also a member of the Montana Paint Manufacturers Association.

National Hydraulic Shows Growth Potential

An enterprise contributing to making Billings a manufacturing complex is National Hydraulic Corporation, located in the Northern Pacific Industrial Sites.

Making valves, cylinders, fluid meters, and hydraulic pumps, the organization is typical of the small units making a specialized product that exist in more developed manufacturing areas of the country. The only difference is that National Hydraulic isn't located near Chicago or Cleveland—it's located in Billings, Montana.

Hydraulics, along with electronics, is among today's fastest growing industries, according to Fred Kester, General Manager of the Billings plant. The national market for hydraulically operated machinery is 15 times the productive capacity which was \$5 billion in 1956. The reason the demand has so far outstripped the supply is the shortage of trained hydraulic engineers. However, Kester predicts, large machinery manufacturers are coming to realize the potential of hydraulics, and this may mean National Hydraulic in Billings will be a very important operation.

The company was started in 1940 by K. H. Hoen, a hydraulic engineer, as H-S Engine Company for the purpose of manufacturing fuel injection parts used in diesel engines. As time progressed, the company added the manufacture of a hydraulically operated front-end loader "Hydra-loader" which is mounted on tractors, hay loaders, road building equipment, and many other units. Thirty per cent of "Hydra-loaders" are sold in Montana, and the rest in the Rocky Mountain area.

Pumps Widely Used

Now the line of patented products produced by this company includes four series of hydraulic pumps ranging in size from 12 gallons to 220 gallons per minute. These pumps have a national distribution.

Sales are expected to top \$1 million in 1957. The payroll of 30-40 employees contributes around \$300,000 per year to the Billings and Montana economy.

Power and Idea

All raw materials for "Hydra-loaders" are shipped into Billings, there fabricated and shipped out again as complex machinery. The reason this can be done is (1) cheap power, and (2) Mr. Hoen, holder of the patents, decided to set up shop in Billings. Originally a Montanan, he wanted to stay here, and the firm has gradually grown.

This business is the type that should be encouraged in Montana. Employment is year-round (in fact, National Hydraulic is now operating on two shifts); it's a Montana company owned and managed by Montanans; "value added by manufacture" is high, since 40 employees turn raw steel into machinery worth \$1 million per year; it's a clean industry; and it's a growth industry, one that will grow with increasing technology.

Other Western States have prospered with such industries. We can too.



Interior view of National Hydraulic plant in Billings, makers of hydraulic pumps for use on material-handling equipment. Sales will reach \$1 million during 1957.



Production has reached 500 prebuilt homes at Mission Homes factory in Missoula.

PRE-BUILT HOMES MADE IN MISSOULA

A new business tied to the growing Montana market is Mission Homes, Inc., which makes pre-built homes in Missoula.

Founded a year ago, Mission Homes makes approximately 500 prefab homes per year for shipment to markets within a 500-mile radius of Missoula, and employs nearly 40 people. The company is associated with Rother Lumber Company of Missoula (James E. Rother, Jr., is President of both companies), which gives an integrated source of supply and cuts down overhead.

Mission makes its prefab homes in panels up to 32 feet long. The panels are joined with a tongue and groove method and then held rigidly by metal ties at the top plates. Openings are cut

in the panels for electrical outlets and bottom plates are drilled for installation of wire. Roof members are all pre-cut, and then paneled at the house site.

With the use of a special 40-foot boom, erection of a 1,000-square foot house, including walls and roof panels, requires six to seven hours using six men. Average cost of erection, including crane rent, is \$250.

Prefabricated housing is becoming big business in this country. In 1957 nearly 200 manufacturers expect to sell about 75,000 factory-fabricated houses. Mission Homes has displayed ingenuity in taking advantage of this trend in Montana. Construction is down in most parts of Montana; these low-cost Mission Homes should stimulate housebuilding.



American Chemet has shipped over 40,000 tons of leaded zinc product and tale from its East Helena plant since 1946.

Urban Zoning Aids Rural Residents

There is a growing trend toward more intelligent use of rural lands. The Montana Department of Agriculture has expressed this trend in its new rural planning program.

It is a fact that rural Montana is growing. The 1960 Montana census shows a whole growth. The State Department of Health reports a 14.2 per cent population increase in Montana since 1940. However, 87 per cent of this growth has occurred in the 10 counties with the largest population, those with the largest cities. Seventeen counties have lost population—all primarily rural counties.

As farms become larger and more efficient, fewer and fewer people are needed. More people have to leave the farm every year. Many go to Montana cities. Between 1940 and 1950, Montana's farm population declined by 22.6 per cent, while the urban areas (cities over 2,500) increased by 19.6 per cent.

But as cities grow in population they also must grow in area. More houses have to be built in outlying areas; more county roads have to be turned into city streets. Some urban expansion into nearby agricultural land is inevitable. It's the only place cities have to grow.

If this urban growth is inevitable, it's only logical to direct that growth to the maximum advantage of all the people. And the best way to assure orderly growth is through zoning.

Manufacturing is confined to proper areas under zoning. There is a minimum spoilage of nearby agricultural lands because any good zoning ordinance contains performance standards. In order to locate in certain areas, industries must meet standards of cleanliness and noise.

Highest Land Values

Farmers living adjacent to urban areas stand to gain from the zoning which directs growth to planned, developed areas. Proper city policies are a major factor in the highest land values in the state. Many farmers living near cities have sold their property at a minimum price, low price, to spend the money and go back to the country and direction of the city growth. The zoning ordinance which sets the growth of the city can be set up to exclude farmers from the city and to protect the farmer's ability to produce.

The zoning ordinance can be set up to protect the farmer's ability to produce and to protect the city from the farmer's ability to produce. The zoning ordinance can be set up to protect the farmer's ability to produce and to protect the city from the farmer's ability to produce.

The 1957 legislature passed a comprehensive planning bill which allows cities and counties to set up zoning districts throughout the urbanized area. This is beneficial legislation, and farmers stand to benefit as well as city folks.

Engineers, Veterans Leave Montana

We all know there are a lot of people moving out of Montana every year.

As Professor C. E. Knaebel of the Department of Agricultural Economics and Rural Sociology at Montana State College says in his booklet *Montana's Population Changes, 1920 to 1950* (Montana State College Agricultural Experiment Station Bulletin 520, p. 3):

"The annual Montana Day picnic is a typical event up and down the West Coast and throughout the Southwest, from Seattle to Los Angeles and on to Santa Fe. Former Montanans gather to talk about the 'good old days,' mutual friends, and the state they left behind. It is customary to burst forth in song, including the following verse:

'Montana! Montana! Glory of the West,
Of all the states from coast to coast
You're easily the best . . .'

"These events dramatize the extent of migration out of Montana, and its predominantly westward course. Since 1920 the state has experienced a considerable net exodus of population. This has changed not only the prospective size of Montana's population, but also the date when the state will reach its maximum numbers."

Some new evidence of this net exodus from Montana has recently been noticed.

Veterans' Bonuses

One startling fact, as developed by James F. Neely, Director of Adjusted Compensation Division, is that 29 percent of all bonuses paid to veterans of World War II were paid to out-of-state residents. In other words, out of 58,737 veterans who lived in Montana in the early 1940's, 17,087 left and didn't return. Nearly 14 percent of all veterans' bonuses were paid to people now living in Washington and California.

By the way, the cost of these bonuses is being amortized by a 2-cent tax on each pack of cigarettes purchased in Montana since 1950.

Engineers Leave

Another interesting fact, according to Brick Brecken Plummer, Director of Montana State College, is that of the 93 engineers graduated from Montana State College in June of 1956, 89, or 95.4 percent, accepted jobs in other states. Only 4, or 4.3 percent, stayed in Montana. Of 29 percent out of 50 graduates, about 12 percent actually remained for a year and then left for a good reason.

BARLEY FOR MALTING TESTED BY MSC

A good example of an agricultural industry that could be established in Montana is barley malting.

High quality malting barley is not in surplus, according to R. E. Eshek, Associate Agronomist at Montana State College. In fact, the 110 million bushels of barley used for malting does not meet the demand of brewers.

Montana Tests

Tests are being conducted in several irrigated Montana areas to determine the suitability of growing malting barley here. Although varieties of barley now grown in Montana are not acceptable for malting, barley is a crop admirably suited to Montana growing conditions. In fact, Montana is the third largest barley producer in the country (after North Dakota and California). At present over 8 million bushels of malting barley from the Klamath Falls area of Oregon passes through Montana each year for malting in the East. This could well be grown in Montana.

This possibility is especially significant when it is remembered that barley is not a surplus crop, and that there is increased irrigation in Montana.

Research in Montana is being conducted in part through the MSC Endowment and Research Foundation. Two trade associations of the malting indus-

try, Malt Research Institute and Malting Barley Improvement Association, have granted money to the MSC Agronomy and Soils Department, which cooperates with the U. S. Department of Agriculture Malt Laboratory, USDA Field Crops Research Branch and individual farmers.

Malting Industry

Another possibility, according to Eshek, is a malting industry in Montana. Malting and brewing are two separate operations, and they may or may not be performed by the same organization. There are five breweries in Montana and several in surrounding states, but there is only one malt house and it does not supply enough malt for the one brewery it serves.

Malting consists of slow, controlled germination of the barley followed by rapid drying and sprout removal. Brewing, on the other hand, typically consists of grinding the malt; mixing with unmalted cereals such as corn; cooking in water; adding hops; fermenting with yeast; and cool storage. Malting barley should be low in protein and high in malt extract. The Montana experiment is being conducted with a variety of barley called "Betze's Two-row."

Persons interested in Montana's economic development should watch the results of this experiment, for malting is definitely an industry which can be established in Montana if local businessmen are alert.

BRIEFS

MARCH INDUSTRIAL HORIZONS had an article emphasizing the need for a complete file of buildings available for industrial use in Montana. Later, a questionnaire was sent to all local development groups. This form has been completed by Chambers of Commerce in Forsyth, Lewistown, Sidney and Three Forks, as well as by a private firm in Missoula. Are there no other available buildings in Montana?

Quarterly Plant Location Survey of New York "Journal of Commerce" came out this month with planned industrial districts listed for Billings (2), Bozeman, Columbus, Havre, Missoula (2), and Sidney. Any omissions occurred because the State Planning Board was unaware of them. Second Quarterly Survey will come out in July. This is read by industrialists all over the country.

MONTANA STATE PLANNING BOARD

Sam Mitchell Building

Helena, Montana

Reports on business concerns appearing in this publication do not constitute an endorsement of either the concern named or its products. Statements in this newsletter do not reflect Board policy unless official action is reported.

Industrial Horizons . . .

Published monthly, free distribution.

Subscriptions will be placed on file.

For more information, please contact:

BULK RATE
U. S. Postage
PAID
Permit No. 83

Montana State Library

This cover sheet created by Internet Archive for formatting.